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(11)

**EP 1 227 042 A1**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**31.07.2002 Bulletin 2002/31**

(51) Int Cl.<sup>7</sup>: **B65D 3/22**, B65D 3/06

(21) Application number: **01830056.6**

(22) Date of filing: **30.01.2001**

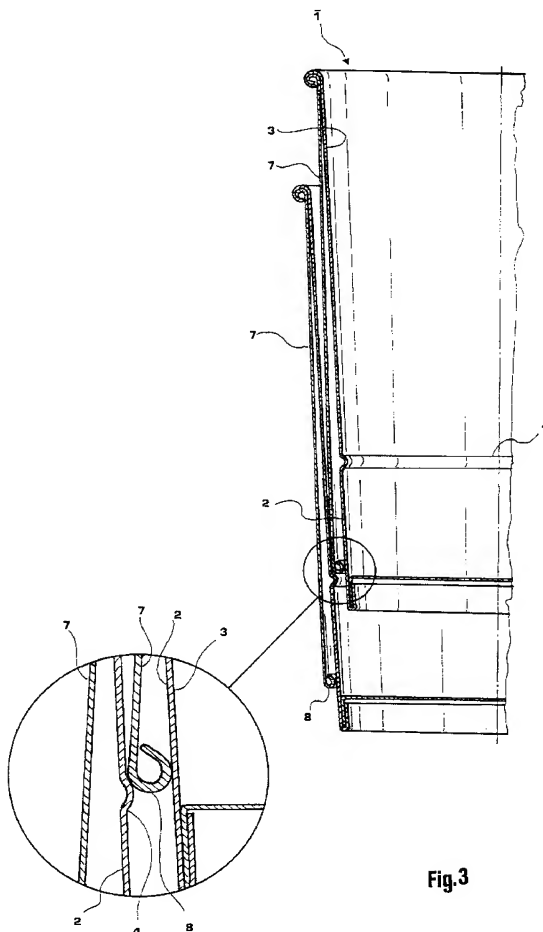
(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**  
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(54) **Cardboard container for drinks and process therefore**

(57) A cardboard container for drinks and a process therefor, the container having a perimetral wall (2) and

a bottom wall and being characterised in that it comprises means (4) for the supporting thereof when it is stackedly arranged in a respective container (1).



**Fig.3**

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## Description

**[0001]** The present invention relates to a container for drinks and, more precisely, of a type having a laminated cardboard wall for allowing the gripping thereof when hot drinks be contained therein.

**[0002]** Several types of containers for hot drinks are already known, typically made in suitable materials like laminated cardboard, PET, foam polystyrene, which are stackable for the subsequent sale thereof.

**[0003]** The problem with the polystyrene, plastics, and also cardboard containers, ensues from the fact that those are prone to get stuck during the stacked storage thereof.

**[0004]** For the plastics or polystyrene containers, several solutions have been adopted which consist in obtaining thereon, during the mould forming thereof, projecting members apt to provide a support thereto during the stacking stage thereof, thus avoiding interference between the walls of a first container when it is stacked on a respective underlying second container.

**[0005]** In the instance of the laminated cardboard containers, it is provided that the container wall be made with two cardboard layers, sandwiched by a web apt to form an air gap. Thus, an insulating effect on the wall is attained. However, a problem of suchlike containers lies, given the wall compliance and the geometric configuration thereof, in their marked proneness to get stuck when stackedly stored.

**[0006]** Therefore, the object of the present invention is to overcome the abovementioned problems providing a cardboard container with laminated walls which be apt to be stacked and not be prone to get stuck onto another container when in the stacked condition.

**[0007]** Hence, according to the present invention a cardboard container for hot drinks, having a perimetral wall and a bottom wall, characterised in that it further comprises means for the supporting thereof when it is stackedly arranged in a respective container, is provided.

**[0008]** The container of the present invention will hereinafter be better illustrated by a detailed description of a preferred embodiment thereof, given by way of example and not for limitative purposes, making reference to the annexed drawings, wherein:

Fig. 1 is a plan view of a blank for the making of the container of the present invention;

Fig. 2 is a schematic perspective view, partially illustrating a process for manufacturing the container of the present invention;

Fig. 3 is an elevational and partially sectional view illustrating the container of the present invention in a stacked condition.

**[0009]** With reference now to Fig. 1, a blank 1 apt to realise said container once assembled, having an outside surface 2 and an inside surface 3 (not shown in the

Fig.) is illustrated. According to a first process of the present invention, it is provided that onto the surface 2 a creasing 4, apt to project internally to the container once assembled, be obtained (better illustrated herein-after).

**[0010]** With reference to Fig. 2, an alternative process for manufacturing the container of the present invention is illustrated. For the sake of simplicity, same parts will be indicated by the same reference numbers.

**[0011]** According to such alternative process, it is provided that the container be formed with an uncreased blank 1, by arranging the former on a forming revolving supporting member 5. The revolving supporting member 5 has on its surface a perimetral groove apt to form a respective creasing 4 onto the outer surface 2 of the container 1 when the supporting member 5 revolvingly engages to a complementary knurl 6.

**[0012]** It has to be specified here that the complete apparatus and the related means for actuating the member 5 and the knurl 6 are not depicted in the Fig., as already comprised in the state of the art and, therefore, not forming part of the inventive scope of the present invention.

**[0013]** Making now reference to Fig. 3, in a partial section an embodiment of the container 1 manufactured with the process of the present invention is illustrated. According to the present embodiment of the container, the latter is provided with a laminated wall wherein a second outside wall 7 fixedly arranged onto the container 1 with a respective forming step already known to the state of the art, is provided. This arrangement allows the manufacturing of a container 1 apt to provide an insulating effect onto the wall 7 and 2 by virtue of the presence of an air gap, hence being particularly suitable for hot drinks.

**[0014]** As it is apparent from the Fig., the forming of a creasing 4 allows a perfect stackability of a container 1 with respect to another identical one by virtue of the fact that the perimetral edge 8 of the second outside wall 7 is apt to rest onto the creasing 4 when the container 1 is inserted in another container 1. The arrangement of the creasing 4 allows to prevent a container 1, once inserted into another container 1, from getting stuck onto the outer walls of the latter. In fact, by virtue of the support provided by the creasing 4 to the outside wall 7, the container 1 is thus maintained in position without making the outside wall 7 thereof adhere onto the inside wall 3 of a respective underlying container 1, thus avoiding a stuck-up thereof.

**[0015]** It has to be pointed out that the present invention is also applicable to containers having an individual plain wall 2 wherein the contact is avoided by interference of the creasing 4 onto the outside wall 2 of a respective container 1 in the stacked condition.

## Claims

1. A cardboard container (1) having a perimetral wall (2) and a bottom wall, **characterised in that** it comprises means (4) for the supporting thereof when stackedly arranged in a respective container (1). 5
2. The container (1) according to the preceding claim, wherein said supporting means (4) is obtained in said perimetral wall (2). 10
3. The container (1) according to claim 1 or 2, wherein said perimetral wall (2) has a laminated structure comprising a second outside wall (7). 15
4. The container (1) according to any one of the preceding claims, wherein said supporting means is a creasing (4) perimetally formed on said perimetral wall (2). 20
5. The container (1) according to the preceding claim, wherein said creasing (4) extends internally to the container (1).
6. The container (1) according to claim 4, wherein said creasing (4) is obtained in one or more circumference segments on said perimetral wall (2). 25
7. A process for manufacturing a cardboard container (1) **characterised in that** it provides the following steps: 30
  - providing a blank (1);
  - obtaining a perimetral creasing (4) on said blank (1) onto the surface which is the wall (2) of said container; and 35
  - assembling said blank so as to manufacture said container (1).
8. A process for manufacturing a cardboard container (1), **characterised in that** it provides the following steps: 40
  - providing a blank (1);
  - arranging said blank (1) on a revolving supporting member (5) apt to form said container (1); 45
  - forming a perimetral creasing (4) during the forming of said container (1) with a related complementary knurl (6) apt to cooperate with said supporting member (5). 50

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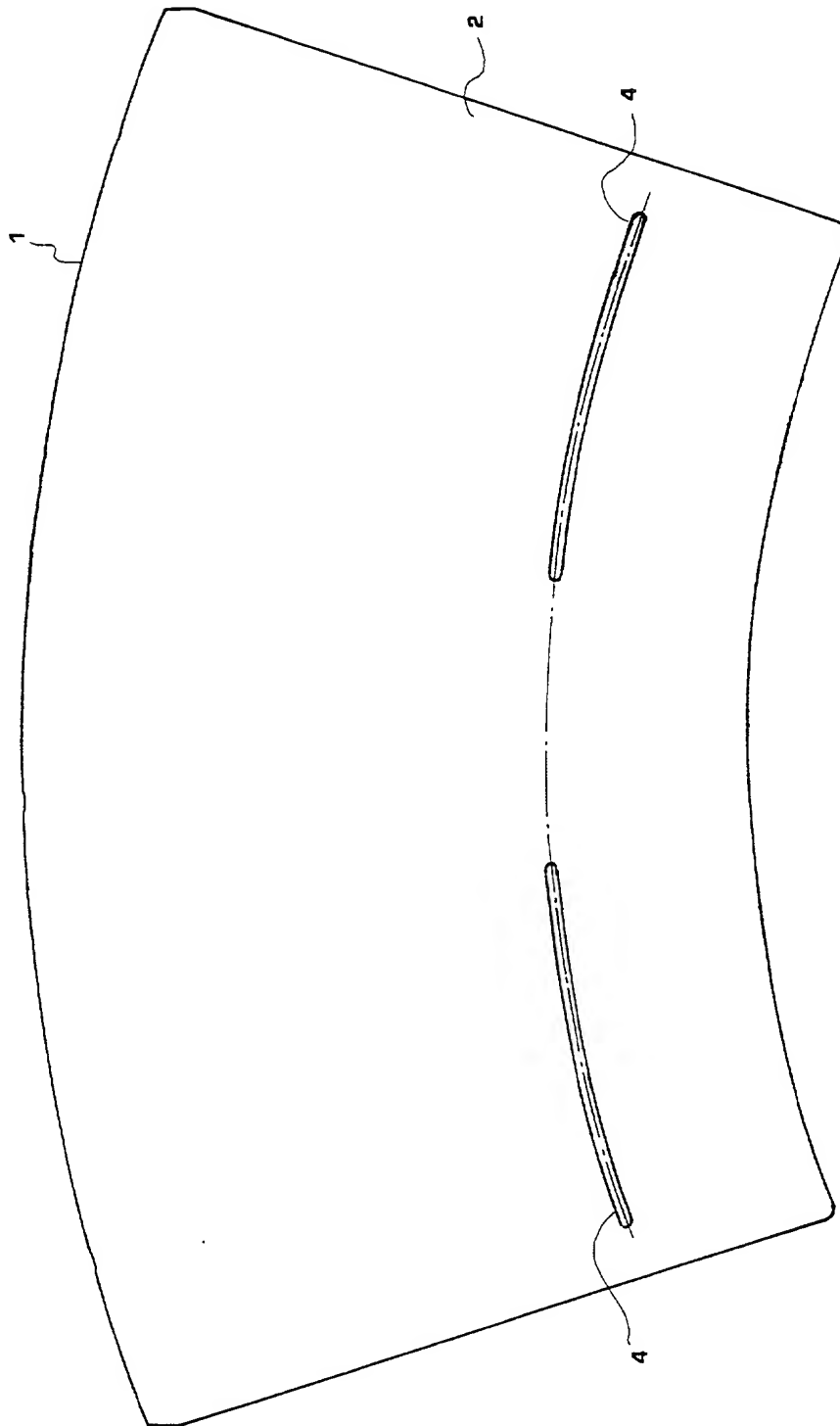
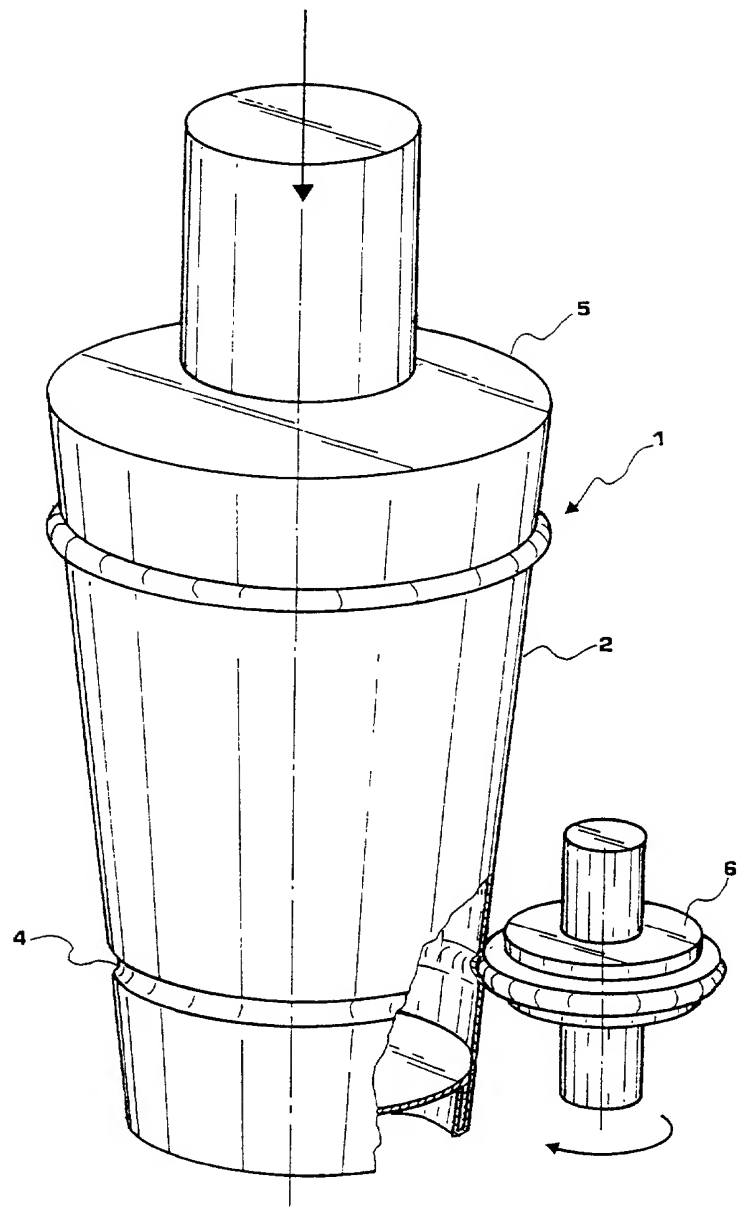
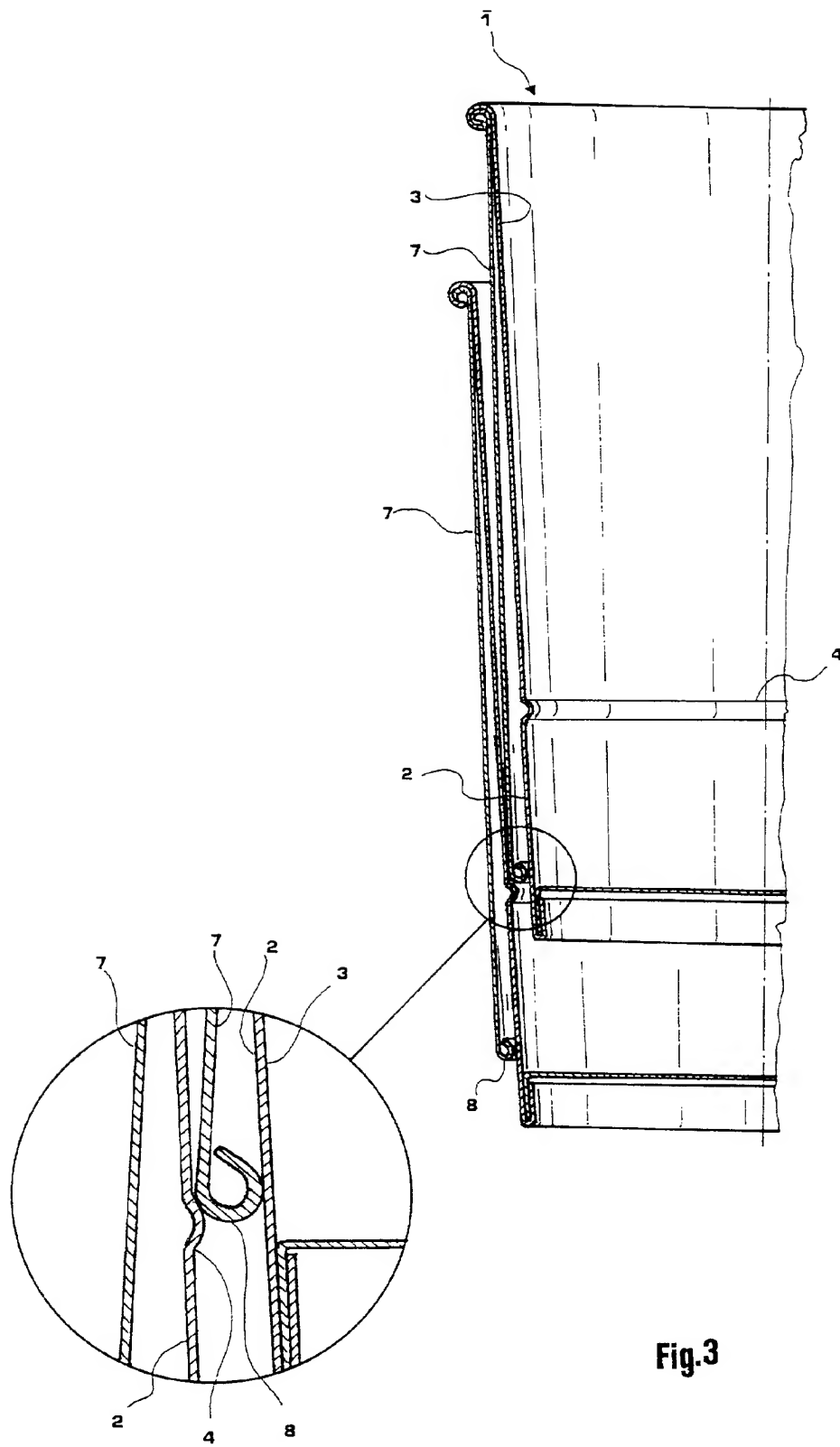


Fig.1



**Fig.2**





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# EUROPEAN SEARCH REPORT

Application Number  
EP 01 83 0056

## DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 1 031 514 A (DAINIPPON PRINTING CO LTD) 30 August 2000 (2000-08-30) * paragraphs [0032]-[0035]; figures 1,4A *	1-7	B65D3/22 B65D3/06
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A	DE 42 26 313 A (EGER ALBERT GMBH & CO) 10 February 1994 (1994-02-10) * abstract *	7,8	
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### TECHNICAL FIELDS SEARCHED (Int.Cl.7)

B65D  
B31C

The present search report has been drawn up for all claims

Place of search <b>BERLIN</b>	Date of completion of the search <b>13 August 2001</b>	Examiner <b>Scheuer, J</b>
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### CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone  
Y : particularly relevant if combined with another document of the same category  
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L : document cited for other reasons  
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 83 0056

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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